

REMARKS

Attorney for Applicants has carefully reviewed the outstanding Office Action on the above-identified application. Applicants have amended the application as set forth herein, and submit that the application, as amended, is in condition for allowance.

Claims 18 and 19 have been allowed. Applicant has cancelled allowed claims 18 and 19, and re-presented those claims as new claims 28 and 29. Claim 18 was initially directed to a method of sensing sound at a video monitor. Claim 18 was amended in a prior response to recite a method of sensing sound at a transparent surface. While the preamble of that claim was amended, the amendment was not shown. Also, the body of the claim was not amended in the prior response. New claim 28 is directed to a method of sensing sound at a transparent surface. New claim 29 corresponds to claim 19, and depends from claim 28. New claim 30 depends from claim 28, and limits the transparent surface to a video monitor. Applicants submit that claims 28-30 are allowable.

Applicants submit that claims 1-3, 12, and 14, which were rejected as being anticipated by U.S. Patent No. 6,483,924 to Kirjavainen, and claims 9-11, which were rejected as being obvious over Kirjavainen, are patentable as amended herein over this reference.

Applicants' claimed invention relates to a large aperture vibration and acoustic sensor. The sensor comprises a first electrically charged layer having a contact side and an intermediate side; a second electrically charged layer having a contact side and an intermediate side; an acoustically compliant intermediate electrically insulating layer disposed between and contacting

the intermediate sides of the first and second electrically charged layers; a first contact layer disposed on the contact side of the first electrically charged layer; and a second contact layer having at least one sensing element disposed on the contact side of the second electrically charged layer, wherein the at least one sensing element and layers of the device move with respect to each other in response to acoustic or vibrational waves intercepted by the sensor, said movement creating an output voltage corresponding to said acoustic or vibrational waves. (Claim 1).

Kirjavainen discloses an acoustic element and method for sound processing. The device comprises two pairs of porous, conductive stator plates positioned in facing relationship with an intermediate material positioned therebetween (see FIG. 1a, elements 2 and 4). The intermediate material comprises a glass fiber plate (see col. 2, lines 37-38). A charged, moving dielectric diaphragm is positioned between each pair of stator plates (see FIG. 1a, element 3; FIG. 1c, elements 3a, 3b). Each of the porous plates includes a plurality of recesses defining air gaps, wherein the diaphragm can move freely. In another embodiment, the device comprises pairs of moving elements with conductive stator plates positioned therebetween (see FIG. 4, elements 3a, 3b, 3c, and 3d (moving elements) and element 2 (stator plates)).

Kirjavainen fails to disclose a sensor having an **acoustically compliant** electrically insulating layer disposed between and contacting first and second electrically charged layers, as set forth in amended claim 1. While Kirjavainen discloses an intermediate layer, Kirjavainen is absent any disclosure relating to an acoustically compliant, electrically insulating layer that can vary in thickness in response to sound or vibration waves. Rather, Kirjavainen

discloses an intermediate material comprising a glass fiber plate, which is a non-compliant material (see col. 2; lines 37-39). As such, the intermediate material disclosed in Kirjavainen is not an active part of the device, in that the intermediate material does not respond to sound or vibration waves. In contrast, the intermediate layer of the present invention is acoustically compliant and is therefore an active part of the device, in that layers of the device can vary in thickness in response to sound or vibration waves. Accordingly, Kirjavainen fails to disclose each element of Applicants' claimed invention as set forth in amended claim 1.

Moreover, the intermediate layer of Kirjavainen does not contact first and second charged layers. Rather, in each embodiment of Kirjavainen, the intermediate layer contacts one or more stator plates (see FIG. 1a, element 2; FIGS. 2a-2d, element 2; FIG. 4, element 2), which are not electrically-insulating layers, but rather, are porous, electrically-conductive plates (see, e.g., col. 2, lines 17-18). Indeed, the charged layers in Kirjavainen contact the stator plates, and not the intermediate material. As such, Kirjavainen fails to disclose each element of Applicant's claimed invention, as set forth in amended claim 1.

Accordingly, Applicants submit that independent claim 1, as amended herein, is patentable over Kirjavainen. Claims 2-3, 9, 11, 12, and 14 which depend from amended claim 1 and contain all of the limitations thereof, are likewise patentable over Kirjavainen.

The Office Action states that it would have been obvious to one of ordinary skill in the art to produce the device of the present invention using a subtractive process to form sensing elements (Claim 9), as well as forming the intermediate layer of the device using a gel (Claim

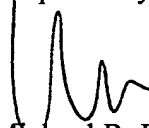
11), because such features are "all well known in the art." However, the Office Action provides no reference in support of this conclusion. The mere assertion that something would have been obvious is, by itself, insufficient to support an obviousness rejection. Accordingly, Applicants submit that claims 9 and 11, which depend from amended independent claim 1 and contain all of the limitations thereof, are patentable.

All issues raised in the Office Action are believed to have been addressed. Claims 18 and 19 were cancelled and claims 28-30 were added. Claims 1-17 and 28-30 are pending in this application. Re-examination is requested and favorable action solicited.

Dated: _____

9/7/04

Respectfully submitted,



Michael R. Friscia
Reg. No. 33,884
Attorney for Applicant
Wolff & Samson PC
One Boland Drive
West Orange, NJ 07052
Tel.: (973) 530-2024
Fax.: (973) 530-2224